SATURDAY, AUGUST 16, 1873.

ORIGINAL LECTURES.

CLINICAL LECTURE

ON A CASE OF DISLOCATION OF THE SHOULDER, OF SIX WEEKS' STANDING.

RUPTURE OF AXILLARY VEIN DURING ATTEMPTS AT REDUCTION—RECOVERY.

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With Notes by DE FOREST WILLARD, M.D.

GENTLEMEN,—I bring before you this morning a woman, 60 years of age, who states that she received an injury upon her right shoulder six weeks ago, and that she has since been incapable of using her arm.

The diagnosis, upon inspection, is not difficult. The shoulder is flattened upon its external aspect; my fingers can be easily hooked beneath the acromion process; there is a round hard prominence in the axilla; the elbow is carried off from the side of the body, and cannot be brought in contact with it without pain; the arm is lengthened; and the hand of the injured side cannot be placed upon the sound shoulder while the elbow is held against the chest.

Such a combination of symptoms can only indicate that the head of the humerus has left its normal articulating cavity and taken a position high up in the axilla, thus constituting the subcoracoid form of these luxations.

The other varieties are the subglenoid, the subclavicular, and the subspinous. Let us study these during the etherization of the patient (Squibb's pure ether used). Their names are sufficiently expressive of their positions. In the subglenoid form, the head of the bone lies upon the under surface of the neck of the scapula, yet it does not merely passively lie there, but is firmly and spasmodically held by the stretched supra- and infra-spinati, subscapularis, coraco-brachialis, teres minor, and deltoid muscles. The long head of the biceps is sometimes torn across, and all of the muscles, having suffered laceration to a greater or less degree, are irritated and spasmodically contracted.

In the subcoracoid variety, the same muscles are put upon the stretch, although not subject to the severe tension of the former case. The capsular ligament is badly torn, and in some cases the coracoid process may be fractured. Almost all subglenoid luxations become subcoracoid after a few hours, by the contraction of the muscles. The subclavicular is exceedingly rare, and is easy of recognition.

The subspinous is the only backward form known, and is quite rare. (Boyer says that it cannot occur without fracture of outer lip of glenoid.—DE F. W.) Should it occur, however, the supra-spinatus would still be put greatly upon the stretch by being wound around the edge of the spine of the scapula; but the infra-spinatus and teres minor, which are inserted with it upon the great tuberosity, having their points of attachment brought nearer to the points of origin, would be relaxed. The subscapularis would be greatly elongated, or perhaps torn across, the humerus being rotated inward, and the elbow carried against the body.

In reduction, these two latter varieties are easily converted into one of the preceding forms, by simply elevating the elbow alongside the head and prying out the head of the bone, or by making traction downward towards the axilla.

The great frequency of dislocations at the scapulo-humeral articulation, equalling if not exceeding those of all other joints of the body, may be easily explained by the shallowness of the glenoid fossa, the extensive and varied movements to which the arm is constantly subjected, and the many powerful muscles which are attached to the upper extremity of the humerus.

In attempting, therefore, a reduction of a dislocation of this bone, it is essential that the force be applied in such manner as to favor the relaxation of the elongated muscles and then to assist them in drawing the bone to its place. True, a luxation may sometimes be reduced by traction, either downward, outward, or upward; but the most rational methods are certainly those which act upon the above principles.

It is for this reason that I prefer the plan of White or La Mothe, modified as described by Dupuytren, since by carrying the arm upward alongside the head, the supra-spinatus muscle, which is the one elongated to the greatest degree, is thoroughly relaxed, especially if the great tuberosity be rotated outward. The practical steps of this manipulation will soon be shown you, and I have found it almost uniformly successful in reducible cases.

Should this fail, however, traction may be made downward, with the heel in the axilla, as in Cooper's method; or outward, as recommended by Malgaigne. Still unsuccessful, either from a closure of the rent in the capsular ligament, or in consequence of adhesions, further extension may be made by a fillet attached to the arm and given to assistants or attached to pulleys, the counter-extension and fixation of the scapula being accomplished by a broad band through which an opening has been made sufficient to admit the arm to the shoulder. The traction can now be made in the various directions as before, but all the movements must be made slowly, steadily, and gradually.

The plans devised for the reduction of difficult cases have been many, but the general principles are apparent, and would suggest themselves to the mind of any thinking surgeon. In cases of long standing, the reduction, which is usually easy in a recent case, becomes either difficult, dangerous, or impossible. When the means already mentioned fail, Jarvis's adjuster may be tried; but when great force in any form is applied, the risks correspondingly increase. Fractures or severe lacerations have frequently occurred, the axillary vessels having been torn upon several occasions. I have never witnessed this accident, but it is, as you can readily see, a source of much danger, and should be always borne in mind, and carefully avoided if possible; although

I regret to say that neither the violence of injury inflicted at the time of the accident, nor the amount of subsequent inflammation, yields us any guide for prognosis in these cases.

In the case before us, the bone has been displaced for six weeks, and various attempts at reduction have been made, yet she has never suffered from pain and swelling, and we will hope that the adhesions are slight. Of course we look for some difficulty after this lapse of time; yet you will remember how frequently cases of luxation of two or three months' duration present themselves at this clinic,—two such cases having been reduced last week, as you recall, both with comparative ease.

I now seize the arm, and gently rotate it little by little, in order to break up all the adhesions which may have occurred. They do not seem strong, and the head of the bone is movable. I next elevate the arm alongside the head, rotate the great tuberosity outward, and, making counter-extension by placing my foot upon the acromion, pull steadily, cautiously, and unremittingly upward, for nearly ten minutes, the object being to bring the head upon the margin of the glenoid; and then quickly perform the second manipulation by bringing the arm quickly down and across the breast, while an assistant places his fist in the axilla. This movement, so successful in recent cases, fails in this instance.

Let me again search for the obstacle, and remove it if possible. I again rotate the arm until the head of the bone seems freely movable, and then make traction directly outward from the body, the counter-traction being made by the hands of an assistant. Again I fail.

This is one of the cases in which subcutaneous division of the capsular ligament has been recommended; but I do not consider it a safe operation, nor is it satisfactorily successful in accomplishing the end desired. Much more force could easily be applied by means of towels and pulleys; but there is always great risk of tearing the vessels or nerves, and an arm was even entirely avulsed by Guérin. We may try these methods, however, with caution. Before doing so, however, I will attach a fillet to the arm, and make one more attempt by La Mothe's method, as before. I draw steadily and perseveringly for several minutes, while an assistant's hand is held in the axilla to guide the head of the bone towards its cavity. It seems to ride upon the rim of the glenoid, but will not enter, even though I now bring down the arm over his closed fist. The case is certainly a stubborn one; but we will try another method.

Notes by De Forest Willard.

Just at this moment, a sudden and rapidly forming swelling appeared over the right pectoral region, distending in an instant the entire right breast, rendering it exceedingly prominent, and forming a firm but fluctuating tumor.

Simultaneously appeared the most alarming symptoms of marked alteration in the circulation. The patient instantly became cold, clammy, and collapsed; respiration ceased, the eyelids were half closed, and the heart's action was barely perceptible over the apex, and not at all at the radials. Professor Agnew's thumb at once compressed the subclavian artery, while the tongue was drawn forward by a tenaculum, and cold douches, ammonia, artificial respiration, etc., instantly tried. At first it seemed that the patient would die in a condition of fatal syncope; but by the opportune presence of a strong electric battery the current was quickly passed along the phrenic nerves, and in a few moments feeble respiratory efforts became visible. The application was continued for fifteen minutes, at the end of which time the patient had rallied so that the pulse was plainly perceptible at the wrist, and the surface commenced to show signs of warmth and life.

Preparation had meanwhile been made to ligate the subclavian, but upon removing the pressure it was found that the pulse could be felt at the wrist with a force equal to that of the other side, that the tumor was not tense and distended, and that it did not pulsate, neither did it seem to be filling with any rapidity or force.

The conclusion was therefore educed that the axillary or some other large vein had been ruptured, rather than the artery. No small vessels could have yielded so large and rapid a hemorrhage. Firm compresses were therefore applied over the swelling, and confined by a broad bandage, while pressure was kept up for two hours upon the subclavian artery in order to lessen the supply of blood coursing through the arm.

Meanwhile, stimulants were freely administered and artificial heat constantly applied to the extremities, and in three hours reaction was established to such extent that the patient seemed out of immediate danger.

The swelling which was accurately defined by the pectoral fascia extended slowly backward, but did not increase in tenseness. The patient passed a comfortable night, complaining, however, of stinging pains in the arm and breast, but with no further symptoms of depression. From this time onward her improvement was rapid, the pain and swelling gradually subsiding, and in ten days she was discharged from the ward. The blood gravitating downward and backward below the fascia finally made its appearance beneath the skin, where it remained until it was absorbed, weeks afterwards. Compression was continued for several weeks, followed by stimulating liniments; and now, ten weeks afterwards, having declined any further attempts at reduction, she has an arm which, although stiff and somewhat painful, seems to be forming for itself a new articulating cavity upon the inferior costa of the scapula.

In searching for other instances of this unpleasant accident, I find but one case in which a rupture simply of the axillary vein is recorded; and the cases of laceration of the artery are also quite rare. After a somewhat extended search through the reports of the hospitals of America and England, and in the various journals published in these countries, I have succeeded in collecting the following cases. The most complete records have been found in Malgaigne's Traité des Fractures et des Luxations, and in Flaubert's Mémoires sur plusieurs Cas de

Luxations, etc., Répertoire d'Anatomie et de Physiologie, 1827, and Hamilton's Treatise on Fractures and Dislocations, 1871.

The sole case of laceration of the axillary vein alone is that mentioned by Froriep,*—a scrofulous woman, æt. 36, in whom the dislocation had existed for twenty days. The vein was torn entirely across, and the patient died in one and a half hours.

This, and the one of Agnew's above recorded, constitute the entire list of accidents to the vein alone.

Platner† has put on record a case in which both vein and artery were injured, the patient dying of hemorrhage from the subsequent rupture of the sac.

Guérin‡ tore the entire arm from the body of a woman 63 years of age, in reducing a luxation of three months' standing, and of course all the structure at the axilla must have been severed.

Charles Bell§ also reports that during the use of the ambe at the Newcastle Infirmary not only was the axillary artery ruptured, but also the surrounding structures to such an extent that immediate amputation became necessary. It is highly probable that the vein was also injured; but the report is incomplete, especially in the fact that the result is not stated.

In Leudet's‖ case, in Rouen, 1824, an enormous swelling appeared in the axilla, immediately after reduction, which, though imparting no pulsation to the fingers, could be seen with the eye to rise and fall with the contractions of the heart. Gangrene supervened in three days, and the patient died in ten, of hemorrhage. A post-mortem examination revealed the fact that the artery was torn across, the rim of the glenoid fractured, and the muscles lacerated.

In Johnson's Medico-Chirurgical Review¶ are recorded several cases from the French of Flaubert,** in which that author states that he himself saw four cases of injury to the axillary or brachial vessels or nerves, and believes either that he has been singularly unfortunate or that other surgeons have not been honest in their reports.

One of these cases was an axillary dislocation, attempts at the reduction of which were followed by an enormous swelling, syncope, and extreme prostration, the patient narrowly escaping. Another was a dislocation of the elbow, which was followed by a similar result, the brachial artery probably having been injured. Another was undoubtedly emphysematous, as the tumor appeared during violent outcries, and was supra-clavicular, extending over the shoulder and to the back; and in the remaining case the nerves were lacerated. He also reports another case in which the patient died after attempts at reduction of a dislocated hip.

Verduc†† ruptured the artery, and the patient died.

Petit* and Delpech† met with similar accidents and similar results.

David,‡ Hôtel de Rouen, reduced a luxation of several weeks' standing, using immense force, and the patient died of mortification, the supposed cause being a rupture of the artery.

Pelletan,§ while attempting to reduce a luxation of four months' standing, discovered a tumor which he supposed to be emphysematous, but upon opening it the patient perished from hemorrhage.

Dupuytren‖ reports a case in which a woman 60 years of age had an axillary dislocation of six weeks' standing successfully reduced. Two or three months subsequently, however, a tumor appeared in the axilla, which, being mistaken for an abscess, was opened, and the patient died on the eighth day from secondary hemorrhage.

Nélaton¶ also had an aneurismal tumor appear three months after the reduction of an axillary dislocation, for the cure of which he tied the subclavian, but with what result is not recorded.

Malgaigne** was compelled to desist from attempts to reduce a displaced humerus of sixty-eight days' duration on account of the occurrence of a tumor in the axilla, which being, however, subsequently arrested in its growth and absorbed under the use of ice, compression, etc., he decided to be due to rupture of the muscular branches instead of the axillary.

Desault†† met with two or more cases;‡‡ but they are to be received with some doubt, having been considered by him as "tumeurs aériennes," or instances of emphysema. Malgaigne, however, believes that they were produced by a rupture of at least the muscular branches of the artery, "the pulse of the patient being scarcely perceptible in the side affected and a syncope which supervened appearing to favor the suspicion of a rupture; but —in the absence of fluctuation, of pulsation, and of any change in the color of the skin—the return of the pulse, the circumscription of the tumor, its resistance, and the sound caused by striking upon it, produced the belief that it was owing not to an effusion of blood, but to a disengagement of air that had been confined in the now lacerated cells of the cellular membrane." The tumor entirely disappeared in thirteen days, leaving a large ecchymosis, however, for a month or more.

Callender§§ tore a small opening in the upper wall of the artery in attempting to reduce a dislocation of six weeks' standing. He very wisely laid open the tumor, turned out the clot, and tied the vessel both above and below the bleeding orifice. The patient died soon after with symptoms of pulmonary embolism.

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* Veraltete Luxationen, etc., Weimar, 1834, p. 35.
† Hamilton on Fractures and Dislocations, 1871, p. 564.
‡ Erichsen's Surgery, fifth American edition, 1869, p. 307.
§ System of Operative Surgery, vol. ii. p. 247.
‖ Gibson's Surgery, 1835, vol. i. p. 346.
¶ Vol. xi. p. 452.
** Mémoires sur plusieurs Cas de Luxations, etc., Répertoire d'Anat. et de Phys., 1827, obs. 3.
†† Opérations de la Chirurgie, 1693, t. i. p. 559.

* Hamilton, *op. cit.*, p. 564.
† Malgaigne, Traité des Fractures et des Luxations, 1855, t. ii. p. 152.
‡ Amer. Jour. Med. Sci., 1828, p. 136, and First Lines of Pract. Surg., S. Cooper, vol. ii. p. 466.
§ Rép. Gén. d'Anat. et de Phys. Path. et de Chirurg. Clinique, 1827, t. ii. p. 95.
‖ Lecons Orales, second edition, t. iii. p. 12; Pelletan, *op. cit.* p. 83.
¶ Erichsen, *op. cit.*, p. 307.
** Desault's Works by Caldwell, p. 149; Journal de Chirurg., t. iv. p. 301.
†† *Op. cit.*, p. 150.
‡‡ Bichat's Mémoire sur la Luxation de l'Humerus, in § 74 says occasionally, but in § 68 twice.
§§ St. Barthol. Hosp. Rep., 1866, vol. ii. p. 96.

Warren,* of Boston, reports a case in which a man 30 years of age fell and dislocated his shoulder. Violent attempts at reduction were made, and, according to the statement of the patient, the booted foot of the operator was placed in the axilla. When he entered the hospital, the arm and shoulder were greatly swollen, but after this subsided the bone was found in its normal place. Five days subsequently, during a fit of coughing, something "gave way," soon followed by a large swelling and discoloration in the axilla. No pulse could be discovered at the left wrist, and the tumor in the axilla became enormous. In six weeks an abscess formed and opened, discharging dark, coagulated blood. Upon the third day there was a sudden gush of blood, which was arrested by pressure, and on the following day Warren tied the subclavian artery. The patient made a good recovery, and in one year afterwards slight pulsations could be distinguished in the radial. In sixteen months the man was greatly improved.

Gibson† twice met with the accident, and was honest, as usual, in reporting each case. The first was in the person of a man 50 years of age, whose left shoulder had been dislocated for two months. For two weeks subsequent to the accident it had been treated as a fracture, and after this ineffectual attempts had been made to reduce the deformity. He was admitted to the Philadelphia Hospital, and, after various manipulations and the trial of all the ordinary means employed, success was at last attained, and the head of the bone slipped into its place. In a short time, however, a swelling was noticed in the axilla, which slowly increased in size, the patient being painless and cheerful, until the evening, when, the symptoms of depression becoming alarming, Professor Gibson was sent for, but arrived too late to save the patient.

At the autopsy the artery was found entirely torn across, it having been firmly bound down by old adhesions to the capsule of the joint where it surrounded the neck of the bone.

His second case was a man 35 years of age, who had dislocated his shoulder nine weeks previous to his entrance into the hospital, and who had already passed through four attempts at reduction, in one instance having been suspended by the axilla over a door.

After a week's depletion, in accordance with the practice in vogue at that time, the attempt was again made by Gibson, assisted by a number of prominent surgeons. Extension and counter-extension were maintained by pulleys for half an hour continuously, after which rotary movements and all the usual methods of reduction were faithfully but cautiously and gently tried for one and three-quarter hours, when they were finally successful.

Upon the next day, however, a pulsating tumor was discovered in the axilla, and on the following morning Gibson proceeded to tie the subclavian. The man, however, sank, and died on the eighth day.

At the post-mortem examination, which was carefully and accurately made, and which is fully described in his report of the case, the left hand and forearm were found in a state of incipient gangrene, while the ligation-wound showed no attempts at union.

The artery was firmly attached to the bone and articular capsule by a ligamentous substance so compact and with so short a portion of the artery between this point of adhesion and the false attachment to the rib that it could hardly have escaped injury. The ends were separated half an inch, the utmost limit allowed by the adhering bands. The external coat of the artery formed the sac of the aneurism; but this had ruptured and allowed the contents to escape into the connective tissue.

"The walls of the true aneurismal sac were of so compact a texture, and its boundaries so well defined, that the conjecture of its having existed previously to the reduction of the bone and that its rupture was a distant and subsequent event, is rendered probable."

The great tuberosity of the humerus had been fractured, but had partially united.

Blackman,‡ of Cincinnati, attempted the reduction of a dislocation of sixteen weeks' standing, which had previously resisted the efforts of six men with pulleys for two and a half hours. The manipulations of reduction, rotation, abduction, and elevation had been continued about ten minutes, when a sudden tumefaction occurred in the pectoral region and rapidly increased in size.

No pulse could be felt at the wrist; and, believing the artery to have been ruptured, the axillary was tied at the upper third of its course. Pressure was made by a broad band and compressed sponge, and on the following day the bulk was greatly diminished.

The patient did well for several days, but on the eleventh he perished from a hemorrhage at the seat of the ligature.

Lister § recently attempted the reduction of a dislocated shoulder of eight weeks' standing. The displacement was of the subcoracoid variety; and while pulling upward, as in La Mothe's method, he heard a distinct crack. No swelling appearing, however, and the head of the bone being still in its false position, various manipulations were employed, and the pulleys used, traction being made both downward, outward, and upward. The force employed was not excessive, and efforts were finally discontinued.

Almost immediately afterwards, however, his attention was directed to an enormous swelling which appeared below and behind the axilla, almost as large as an adult human head. The pulse being absent at the radial of the injured side, a rupture of the axillary artery was diagnosed, and the operation of tying it commenced. An incision was made directly into the axilla, and the extravasated partially-coagulated blood turned out.

* Amer. Jour. Med. Sciences, vol. xi., N. S., 1846; Med.-Chirurg. Transactions, vol. xxix. p. 25, 1846.

† Gibson's Surgery, vol. i. pp. 325, 334; Chapman's Phila. Jour. Med. and Phys. Sciences, 1823, vol. vii. p. 81; Amer. Jour. Med. Sciences, 1828, p. 136.

‡ Western Lancet, Nov. 1856.

§ Lancet, Feb. 1, 1873; Edinburgh Medical Journal, March, 1873.

The arm being held off from the side, the artery was so compressed against the head of the bone that no hemorrhage occurred; but upon being relaxed by the side of the body a free bleeding took place. The orifice was at last found to be concealed upon the posterior wall, from which a stream was so poured out into a cavity and reflected forward that it seemed to be a regurgitant stream from a large branch like the subclavian. Careful examination, however, proving that the main vessel was ruptured, a ligature was applied both above and below the opening, the vessel cut across, and the ends again secured. The opening was found to be about two lines in diameter.

The head of the bone was then removed, to facilitate subsequent reduction. The patient, although greatly reduced by the loss of blood, rallied a little, but soon sank, and died in three hours.

Mr. Lister, in his report of the case, regrets that he did not transfuse.

At the autopsy the explanation of the accident was evident, and is so instructive that I quote it in full:

"The surface upon which the head of the bone had rested in its new situation simulated cartilage in smoothness and firmness, and was formed anteriorly by a dense fibrous structure, strengthened with a considerable amount of osseous deposit in the form of a spicula, proceeding chiefly, though not exclusively, from the coracoid process and the surgical neck of the humerus: a state of things fully confirming the wife's report as to the long time that had elapsed since the accident. The broad and strong osteo-fibrous band thus connecting the humerus with the coracoid process had lain over the head of the bone, constituting a partial capsule for the new joint. At the same time it was intimately connected throughout, by condensed tissue, with the sheath of the axillary artery, which lay over it. Thus the vessel, instead of being surrounded by loose and yielding structures, as in the natural state, was attached, through the medium of the osteo-fibrous band, to the coracoid on the one hand and the neck of the humerus on the other; and when these bony points were separated from one another by the lever-like action of the humerus when the limb was drawn upwards, the artery as well as the band was necessarily subjected to violent traction. Accordingly, the band, as strong as it was, was found to have been torn right across, and the rent in it was exactly opposite to the rupture in the artery. The giving way of the vessel had been rendered the more easy by atheromatous degeneration of its walls, which was present in an advanced degree. The vein also showed evidence of having been extremely stretched, by considerable narrowing of its calibre at the same situation.

"The chief lesson to be learned from this sad case seems to me to be that in subcoracoid luxations there may be, as early as eight weeks after the accident, such adhesion of the artery to the scapula and the humerus as to make it dangerous to employ even the manipulative treatment without the pulleys, and especially the upward traction of the limb. For, as was remarked before, and will now be readily understood, the snap heard in the preliminary manipulation was in all probability caused by the rupture of the fibrous band above described, accompanied by the giving way of the vessel."

In common with Mr. Lister, Professor Agnew also believes that the method of reduction by traction upward is, in old dislocations, more liable to produce a laceration of the vessel; and although it has been his favorite mode, and will be continued in all recent cases, yet in those of long standing he will first attempt others which do not put the artery so greatly upon the stretch.

He also believes that the limitation of the circulation by controlling of the subclavian assisted greatly in keeping a sufficient supply of blood in the brain to prevent fatal syncope, and that in such sudden cases compression even of the abdominal aorta would be beneficial in keeping up the proper meningeal supply.

Another case, which would come very properly under a report of this kind, is recorded by Adams.*

The rupture of the artery in this case was not produced by the surgeon, but by the same accident which occasioned the luxation. The patient was thrown down by a runaway horse, and was brought to the Jervis Street Hospital with his left humerus dislocated and with an enormous swelling of the axilla. No pulse could be detected in the radial or brachial arteries of the injured side, and the patient was cold and prostrated, and so relaxed that the bone was slipped into its place by a slight manipulation.

The deep axillary swelling remained stationary for several days, no pulsation being perceptible either in it or in the arteries of the limb. After ten days, O'Reilly found the tumor upon the increase, and tied the subclavian in the third portion. The patient was seized with erysipelas and lost two fingers by gangrene, but he finally recovered, and was under observation several years afterwards.

The above constitute all the cases which have been discovered, and I believe that the report is complete to the present time.

Recapitulation.—Rupture of vein alone, 2 cases,—Froriep and Agnew: 1 fatal, 1 recovered.

Rupture of vein and artery, 3 cases,—Platner, Guérin, Bell: 2 fatal, 1 not stated.

Rupture of artery, 19 cases,—Leudet, Flaubert, Verduc, Petit, Delpech, David, Pelletan, Dupuytren, Nélaton, Malgaigne, Desault (2 cases), Callender, Warren, Gibson (2 cases), Blackman, Lister, and Adams: 12 cases fatal, 6 recovered, 1 not stated.

The axillary artery was tied in 3 cases,—Blackman, Callender, Lister: all fatal.

The subclavian was ligatured 4 times,—Gibson (fatal), Warren (successful), Adams (successful), and Nélaton (not stated).

(Gibson did *not* tie the subclavian in his first case, as reported in most of the Surgeries.)

Total, 24 cases: 15 terminated fatally, 2 are uncertain, and 7 recovered.

* Todd's Cycl. Anat. and Surg., art. on Shoulder, Abnormal Conditions of, p. 616; Holmes's Surgery, vol. ii. p. 827.

The successful cases were those of Desault (2), Flaubert, Malgaigne, Warren, Adams, and Agnew.

The case of Adams perhaps ought not to be reckoned with the others; yet it is so parallel an accident that I have deemed it advisable thus to place it.

Serious injury has also frequently been done to the axillary nerves; in some cases even the plexus being torn from the spinal column, in others various degrees of paralysis of the arm having followed. Malgaigne, Hamilton, Lenoir, Larrey,* and others report a number of cases.

Michaux (Hôpital de Louvain, 1841)† in reducing a luxation of the elbow tore off the median nerve and the brachial artery. He amputated, and saved his patient.

Various other accidents are reported as the results of efforts at reduction, but the above are all that are directly connected with the dislocation under discussion.

The cases are certainly sufficiently numerous to warn us against employing too much force; yet in the immediate case under notice only manual traction was made.

ORIGINAL COMMUNICATIONS.

YELLOW FEVER.

BY HARVEY L. BYRD, M.D.,

Professor of Diseases of Women and Children in the College of Physicians and Surgeons of Baltimore; President of the Epidemiological Association of Maryland, etc., etc.

Read before the Association by Appointment.

IN presenting yellow fever for the consideration of the Epidemiological Association, no attempt will be made at mere literary display, or the clothing of ideas and facts with the charms of rhetorical drapery. As all science is but nature understood, and she is when unadorned adorned the most, our subject will be treated in as simple and perspicuous language as practicable. It must, however, be obvious that within the limits of a brief paper like this only the outlines, so to speak, of a subject so voluminous can be drawn; and attention will therefore be directed chiefly to those facts and observations which have come more immediately under our personal notice, or have been gleaned with some care from the writings of physicians of large experience in treating the disease, as those most likely to afford any particularly attractive features to a scientific body like this.

HISTORY.

Nothing concerning the source or origin of yellow fever can be obtained from the various names by which it has been recognized or described. They relate either to the place of visitation or invasion, or to some fancied or real pathological change of most frequent occurrence during the prevalence of the disease in an epidemic form. It was probably first introduced into Southern Europe, the West India Islands, and the continent of North and South America, from the west coast of Africa, its natal place. Had European ambition for extended dominion and territory, or the avarice and cupidity of the New England slave-trader, never attempted the invasion of the jungles of Western Africa, there is reason to believe that the hecatombs which have marked the visitations of the pestilence in the West Indies and on the shores of this continent, at least, would never have been known. The autochthones or aborigines of those lands knew nothing of the disease until brought to them by ships engaged in a most unholy commerce. As it is chiefly with the disease as it concerns us of the United States we purpose to deal, it may be observed that the summer, or warm season of the year, is the period during which its visitations have prevailed epidemically and been most destructive in their character.

LOCALITY.

As it is comparatively unknown in the country, and confined almost exclusively to cities and large towns, as an epidemic, and as in those cities and towns holding commercial relations with tropical countries it always establishes itself before interior localities become affected, the importance of strict quarantine regulations in such commercial cities during the hot season cannot be overestimated. It might prove interesting, did time permit, to introduce the date of its visitation to the several cities of our country, and the duration and severity of the same; but we must pass on, merely mentioning a few of the principal cities in which it has prevailed, viz.: Boston, New York, Philadelphia, Baltimore, Norfolk, Wilmington, Charleston, Savannah, Mobile, New Orleans, and Galveston. It will be observed that all the places named are seaport cities, or cities engaged in foreign commerce. From Charleston and Savannah it has been carried when epidemic to Beaufort and Blackville, South Carolina, and to Augusta and Darien, Georgia; from Mobile to Selma and Montgomery, Alabama, and from New Orleans to Natchez and Vicksburg, on the Mississippi River, and other places of note, thus *proving* that it is a *transmissible* disease.

SEASON.

With a protracted temperature in our sea-board cities of from 85° to 93° Fahr., the introduction of the yellow-fever germ or fungus will as certainly develop that disease in the unacclimated Caucasian, as the introduction of the smallpox germ will give rise to that scourge in an unvaccinated community.

CAUSE.

From what has just been stated, it will be seen that we believe the disease to depend upon a *specific* cause, and that cause to consist of organic matter. This theory is sustained by a number of well-attested facts. Like much of the flora indigenous to hot climates, the yellow-fever germ or fungus requires for its proper development and growth a certain continuous temperature. Eighty-five to ninety or

* Bul. de la Soc. Chirurg., i. 1.
† Debruyn, Des Luxations du Coude, Thèse Inaug., Louvain, 1843, p. 77.

ninety-five degrees of Fahrenheit is the temperature which experience has shown to be most favorable to the spread of yellow fever epidemically in this country, and like exotic plants, when *exposed, the yellow-fever germ is effectually destroyed by frost.* In the West Indies, and in the tropical districts of this continent, where the summer temperature is perpetual, these germs have become naturalized, so to speak, and the disease is found to exist perennially in some cities, by the continuous introduction of the unacclimated.

The winters in all the sea-coast cities of this country, except possibly New Orleans and Galveston, are too cold for the yellow-fever germs or fungi to be perpetuated, and they must, therefore, be re-introduced from season to season in order to the production or development of the disease. It is a disease *sui generis*, as contagious under favorable circumstances as smallpox or hooping-cough. Assertions of this character are not made lightly, or without due consideration of their import and value. *It bears no striking resemblance to any other form of disease*, and when once carefully studied at the bedside, and in the dead-house, can *never be mistaken*, by an intelligent observer, *for any other affection.* When *the important test* is applied, that is recognized as of such *uniform value in other known forms of contagious disease*, it will be found to respond with *much greater* emphasis and distinctness in yellow fever *than in any other disease;* viz., *one well-defined attack of yellow fever protects* the survivor, *with almost absolute certainty*, from a subsequent one. On this question, Dr. Bartlett says,—

"This point in the natural history of yellow fever was made the subject of a special and formal investigation, after the cessation of the epidemic at Gibraltar in 1828. At the instance of Sir William Pym, a commission was appointed for the express purpose of collecting such facts as might settle the question. The commission consisted of thirteen physicians,—French, English, and Spanish. The medical men of Gibraltar, civil and military, thirty-three in number, all of whom had been familiar with the disease, appeared before the commission and stated the results of their experience. The aggregate number of patients with the disease, seen or treated by them all, amounted to about *twenty-seven thousand.* These physicians were invited to state the number of cases in which they had known the disease to occur a second time, and, as simple assertions were inadmissible, the commission decided that they would receive those cases only in which the symptoms of the first and second attacks could be given, whether these symptoms had been noted by the physicians who communicated them, or whether they came through the patient himself but were unequivocal. The whole number of cases of presumed double attack, thus communicated to the commission, was only *thirteen.* Upon these thirteen cases each member of the commission expressed his opinion by a vote, writing upon a piece of paper the word *evident, probable, doubtful*, or *inadmissible*, for each case. A majority of the commission declared in this manner *one* of the cases *evident*, three of them *probable*, and the remainder *doubtful* or *inadmissible.* The following fact, on a much smaller scale, but hardly less conclusive, was communicated to the commission by M. Broadfoot. The military domestics employed during the epidemic in the care of the sick were one hundred and sixty in number, and none of them had had yellow fever in any anterior epidemic. The civil domestics were sixty-one in number, and, with two exceptions, had already had the disease. These two, and these two only, among the last, contracted the fever, and forty of the military domestics, all the rest escaping. Other facts of a similar character were also presented to the commission. Slight and mild attacks of the disease seemed to be quite as preservative against its recurrence as grave and severe ones; and it did not appear that the protective effects were in any degree diminished by time."

RACE.

The *native* African is *exempt* from the disease as it has prevailed in this country, and even his descendants, for four or five generations, in our Southern cities, enjoy great immunity from it. In 1820, during a devastating epidemic in Savannah, Georgia, Dr. W. C. Daniel, a most enlightened and distinguished practitioner, who was personally known to us for several years before his death, stated that "near three hundred native Africans recently captured on the coast by government vessels were brought to Savannah, and remained there during the epidemic, and not one of them took yellow fever." We have never seen a case of *black vomit* in a genuine negro, however long his ancestors may have resided in the South. The most susceptible race is the Caucasian, and the purer the type the greater the liability to the contagion. The mulatto occupies, so far as susceptibility to the fever is concerned, an intermediate place between the Caucasian and African races, being less liable than the former and more exposed to an attack than the latter, his liability or exemption being dependent on the greater or less amount of Caucasian blood. Thus, the mulatto—half white and half negro—may be said to be half as liable to an attack on exposure to the contagion as the white man; the quadroon, one-fourth as much so; and the octoroon, or third remove from the white race, one-eighth. Are these statements of no significance? Extended observations have proven them facts.

SEX.

More males fall victims to yellow fever than females. Greater exposure to the weather, if it should have no other effect, predisposes the male sex more than the female to the epidemic influence. As a rule, the *strong* and *robust* at the commencement of an epidemic suffer more than those who, from feeble strength, are unable to take active part in business concerns.

ACCLIMATION.

As already stated, one attack almost certainly protects the individual from a subsequent one. Continuous residence for many years in yellow-fever regions produces a degree of exemption

which protects the individual from the disease in mild epidemics in many instances. But nothing affords surety to the white man in severe visitations save a previous attack of the disease.

MARSH MIASMA.

Observation shows that certain precedents are followed by certain subsequents. Both observation and experience prove that of all the laws by which events are linked together the relation of cause and effect is the most unvarying and the most constant; and we are led to believe that the laws which govern the development and motions of the heavenly bodies are not more unvarying in their operation than those which control the action and influence the development of the small and minute particles or atoms of matter existing in all parts of creation. Wherever matter exists, force resides, which latter can be brought into active operation under its own or appropriate stimuli.

To concede the government of the sun and the planets to the operation of certain and immutable laws which we know to be true, as calculations concerning them have been made with mathematical accuracy and precision, and to deny the existence and operation of equally certain and unchangeable laws in the development and treatment of disease, would be to rob Deity of half his attributes and perfections. While we admit that the same accuracy and precision in the present state of our knowledge are unattainable in our investigation of the causes of disease and the action of remedies, we are nevertheless not to conclude that order and symmetry, relation and harmony, do not exist in the microscopically small as well as in the great bodies of the universe, simply because the laws which govern them cannot now be presented with unerring accuracy and precision or clothed in the imposing array of mathematical formula. Contingency and verisimilitude are therefore but the legitimate offspring of human ignorance and superstition, and hence cannot be supposed to have any existence in an enlightened and cultivated intellect.

Miasma or *marsh effluvium*, the prolific source of intermittent and remittent or bilious fever so called, is *not* the source or cause of yellow fever. In certain districts and communities where bilious fever is an annual visitant, and where its appearance is looked forward to with the greatest dread and apprehension, yellow fever is totally unknown. Georgetown, S.C., situated in the midst of the rice-growing region of the Pedee and Waccamaw Rivers, has never suffered from a visitation of yellow fever, though on the coast and less than fifty miles from Charleston. Yet in this notoriously insalubrious climate, though bilious fever has scourged it more or less frequently since its early settlement, with a violence, it was said a few years ago, unsurpassed by any other town in the world except Alexandria in Egypt, never has a single case of yellow fever originated within its limits. It is known that yellow and bilious fevers may exist or run *pari passu* for a time in certain localities; and from this circumstance, doubtless, the idea of its miasmatic origin was conceived. This hypothesis is erroneous, as the two diseases differ as widely in their symptoms and pathological appearances as any other known diseases whatsoever. In fact, there is great paucity in the common phenomena of the two fevers, and no parallelism whatever can be drawn between the leading symptoms. They are *proven* separate and distinct in various ways; but only some of the more prominent evidences of this assertion need be introduced in this place. First, *marsh miasma* will produce intermittent and remittent fever alike in the white, copper-colored, and black races, when exposed to its action, and it will continue to do so from year to year so long as the parties reside in miasmatic localities, no point of acclimation or exemption being ever attained. Yellow fever, on the contrary, affects the Caucasian race chiefly, the African being almost wholly exempt in the Southern States, however much exposed. Again, one attack is almost absolute protection against a subsequent one, no matter to what extent the party may be exposed to the disease. More could be said on this point; but this must suffice.

A careful examination of many localities where yellow fever has prevailed proves them free from even the existence of marshes, and therefore from marsh miasma. Dr. Gillhurst says, in speaking of Gibraltar, "It cannot be admitted that Gibraltar furnishes sources from which *malaria, in the usual sense of that word*, arises sufficient to account for the appearance of a malignant fever." "The island of Barbadoes is described," says Dr. Bartlett, "as rocky and dry, with very little marshy or wet land. Brimstone Hill, in the island of St. Kitts, is a conical mound rising to the height of seven hundred feet above the level of the surrounding plain. It is described as a volcanic rock, dry, nearly destitute of vegetation, and desolate in its entire aspect. It is generally free from yellow fever, but not uniformly so. In 1811 and 1812 the disease appeared there, and was very fatal. Stony Hill, in Jamaica, is 1300 feet above the level of the sea. It is described as an entire mass of calcareous rock, covered with trees except on the summit, but with little soil, and producing scarcely any grass or plants; and yet yellow fever does sometimes prevail extensively among the troops stationed on its summit."

CONTAGION.

In the sense in which the term contagion is usually understood, yellow fever is a contagious disease. Some have objected to the term, even where the individuality of the disease is admitted, and say that it cannot be used to designate that mode of propagation which we recognize in smallpox, measles, etc. If what was said a while ago, when speaking of its *transmissibility*, and of the temperature in which the germs are found to develop and propagate most rapidly,—viz., prolonged heat of 85° to 90° Fahr.,—be borne in mind, it will be readily understood how the inhabitants of a city in which these germs have been introduced will sooner or later become impressed by them, and how strangers from healthy localities may contract the

disease when visiting an infected city even for a few hours, and sicken and die, or carry the germs of the fever to healthy communities. Instances under our own notice and the observation of intelligent physicians have so frequently occurred, and are so well known and understood by the non-professional even, in yellow-fever districts, that more than mere reference to the fact would seem a work of supererogation in a paper like this.

Not only have the germs or fungi of yellow fever been carried from an infected to a healthy community, but even the clothes of persons on dying from the disease have conveyed the germs, and infected, when exposed and handled, relatives and friends in healthy communities hundreds of miles away. You may denominate the contagion of yellow fever a contingent one; but it is nevertheless a contagion.

NOMENCLATURE.

Yellow fever, mal de Siam, typhus icterodes, malignant pestilential fever, Bulam fever, Mediterranean fever, etc., are among the names which have been applied to the disease under consideration. The eyes and skin are tinged with an orange hue earlier or later in a large proportion of cases; and this circumstance has given rise to the name by which the disease is known among English-speaking people as yellow fever.

It is a disease emphatically of one paroxysm, peculiar in its character, and should be classed among fevers of the *continued type*. Historically, it is a disease of towns, seldom or never assuming an epidemic character in the country or sparsely populated districts, and is therefore a local, and never a general, epidemic. The *materies morbi* has been stated already to consist of germs or fungi, which, in a certain temperature, may be communicated from one individual to another, and even conveyed by persons or clothing to great distances, sufficiently active to infect healthy unacclimated individuals and communities.

(To be continued.)

NOTES OF HOSPITAL PRACTICE.

CASE OF ABSCESS OF LIVER WITH ULCERATION OF COLON.

BY FRANCIS L. HAYNES, M.D.

THE following notes, giving the history of a case treated in the medical ward of the Episcopal Hospital during the service of Dr. Herbert Norris, are, I think, of sufficient interest to merit publication:

J. R., aged 48, a native of England, and by occupation a weaver, was admitted April 5, 1871. He stated that he had been sick for five weeks, during which time he had suffered from profuse diarrhœa; he had had a chill daily, "for some time." Although he had found his way to the hospital alone, he was extremely weak, and the powers of his mind were so much impaired that it was impossible to obtain any satisfactory history of his illness.

On the evening of admission the temperature was 103½°; pulse 128, very weak. The abdomen was tender on pressure, especially over the stomach and liver. Dulness on percussion existed over the base of the right lung, and crepitant râles were heard in that situation.

April 6.—Passed two liquid stools containing a considerable quantity of bright-red blood. One drachm of solution of morphia was directed to be given every four hours.

April 7.—Passed three yellow stools, all very liquid and containing numerous flocculi.

April 8 and 9.—No evacuations from the bowels occurred. His tongue, which had been coated white, assumed a brownish hue. He grew weaker and more stupid. Ecstasis was now noticed.

He expired on the afternoon of the 10th, immediately after a profuse hemorrhage from the bowels.

The treatment consisted in the administration of large doses of quinia, opium to check diarrhœa, alcoholic stimulus, and large quantities of liquid food.

RECORD OF TEMPERATURE AND PULSE.

	MORNING.	EVENING.		MORNING.	EVENING.
April 5, temp.		103½°	Pulse,		128
" 6, "	101½°	101°	"	128	120
" 7, "	98°	101°	"	114	120
" 8, "	101°	102°	"	138	138
" 9, "	102°	102°	"	136	138
" 10, "	102°	106½°	"	136	152

Autopsy, nineteen hours after death.—Rigor mortis well developed; body not emaciated; the dependent portions of the body and the anterior surface of the arms discolored blue.

Head.—Brain and its membranes presented marked venous congestion.

Thorax.—A small amount of serum in pericardial sac. Heart very flabby; loaded exteriorly with fat; a large "chicken-fat" clot occupied the tricuspid orifice and was intimately connected with the valve. The walls of the heart were softened, could be readily torn, and on microscopic examination presented marked fatty degeneration of the muscular fibres.

The right pleural sac was nearly filled with bloody serum; the lungs were somewhat congested, the base of the right lung intensely so; diaphragmatic and pulmonary pleura adherent on right side.

Abdomen.—Stomach normal, except that its epithelium presented under the microscope the appearance of fatty degeneration. The walls of the small intestine were very thin, and the epithelium of its lower portions had separated in the form of flakes.

The cæcum was thickly studded with circular ulcers, some quite deep, some superficial. They varied in diameter from one to one-eighth inch. A few ulcers were found in the ascending and transverse and one in the descending colon. The walls of the descending colon were very soft, nearly black in color, and their inner surface was covered with dark, thick blood. Rectum normal; mesenteric glands moderately enlarged.

The *liver* was enlarged, and weighed five and a half pounds. *On its convex surface, bounded above by the diaphragm, was a large abscess*, which contained eight fluidounces of thick gray pus. The walls of the abscess were very ragged, and presented no appearance of a limitary membrane. On microscopic examination the liver-cells were found to be distended by fat-globules.

TETANUS AFTER HYPODERMIC INJECTION OF QUINIA.—Two cases are recorded by Dr. Odevaine, in the *Indian Medical Gazette*. In the first case he employed sulphate of quinine dissolved in citric acid; in the second, neutral or soluble quinine, without any acid. An abscess formed in the situation of the puncture, followed by tetanus, and the death of the patient. Dr. Odevaine concludes that quinine exerts a special action on the nerves, or that the paludal cachexia, against which he was acting, exerts a peculiar influence on them.

TRANSLATIONS.

SYPHILITIC INFECTION WITHOUT COITUS.

A Clinical Lecture before the Berlin Medical Society, by PROF. LEWIN. Translated

BY DR. WM. ASHBRIDGE.

THE women and children presented at this lecture had all been infected with syphilis, but none of them by means of sexual intercourse. Some of the women shared their disease with their children, but it had also been communicated to them in other ways. For the sake of clearness and convenience, the nine patients were divided into several groups; the first group consisting of two women and their children. The first of these patients was an unmarried woman, in whom the disease manifested itself in a maculated and papular eruption, as well as in some other forms. Upon her under lip there was an induration the size of a bean. The second patient, a married woman with symptoms of constitutional syphilis, presented two similar indurations, one on either side of the nipple. These two parts, the under lip and the nipple, were in the respective women the points at which the disease made its entrance into the system. That this was true—that these indurations were really the seats of the initial lesions, and not later manifestations of the constitutional infection—was proved not alone by the subjective but also by the objective evidence adduced in the two cases. In regard to the subjective evidence (*i.e.*, the history of the case as given by the patient herself), the first patient, an unmarried girl of twenty, who had never before suffered from a similar affection, and had not been in the hospital nor under the observation of the police, gave the following history of herself. At the seventh month of her pregnancy, she noticed an apparently insignificant point of irritation upon her lower lip, which at first caused her no anxiety, but was very sluggish in healing, and, although it finally healed, left behind an induration. Some time before her own infection, she had noticed that the lips of her lover, who was the father of her child, were sore. After the birth of her child, occurring some weeks before the normal time, she noticed that it was weakly and covered with rashes and sores, and she was compelled to seek aid in the hospital.

The second patient, a married woman, the mother of three children, who up to this time had been healthy, stated that eight months after her last confinement, which had been a normal one at full term, she took to her breast a strange infant. Between three and four weeks later she noticed sores upon her nipple. As the infant, on account of an eruption, appeared to her to be of doubtful health, she sent it back, and shortly thereafter it died. On account of her own failing health, and more especially on account of the state of her child, which became affected with a sore tongue and with eruptions upon its skin, she sought assistance at the hospital. The positive proofs of the view that indurations must be looked upon as the seats of initial lesion, drawn from observation of the facts themselves, were as follows:

1. The condition of the lip and nipple, presenting the following conditions characteristic of the initial lesion of syphilis:

a. The consistence of a gumma of a medium degree of hardness.

b. The sclerosed mass deeply situated in the subcutaneous tissue, so that it is almost impossible to perceive any prominence of the induration over the level of the normal tissue by which it is surrounded. By this last condition it is distinguished from the broad condyloma, which, caused by a hypertrophy of the papillæ, always elevates itself more or less above the normal tissue about it.

c. A sharply-defined line between the induration and the surrounding normal tissue. By this means the diagnosis between the induration of a phlegmonous inflammation and that of syphilis can be made.

d. The characteristic dark-brown coloration.

2. The negative proof—*i.e.*, the total absence of any initial lesions upon the genitals, upon which could not be found any erosion, ulceration, or even scars or pigmented patches—goes far to strengthen the diagnosis.

3. The characteristic course of the implication of the glands. Instead of indolent swellings in the glands of the groin, these are noticed as being but little if at all affected, while those of the parts in which the infection took place are found much swollen and indurated. In the patient with the induration upon the lip, not only was the submental gland enlarged, but also the lymphatic gland situated under the angle of the jaw on the left side; the deeper glands also with which those of the face communicate, as well as those of the parotid region, showed marks of the same action.

In the second patient, in whom the initial lesion was on the nipple, numerous glands belonging to the lymphatic plexus of the axilla were found in the same condition, also scattered ones under the edge of the pectoralis major muscle, enlarged to the size of a duck's egg.

When the children of the two women were examined, they were found to be in the following condition: The one, the son of the unmarried woman, infected in the seventh month of her pregnancy, and at the time of examination three months of age, had been born two or three weeks prematurely, and presented the following symptoms: 1. General emaciation and weakness. 2. Swelling of the inguinal, cervical, and occipital glands, in varying degrees. 3. Traces of an eruption maculated and papular in its character. 4. Induration of the right testicle. 5. A symmetrical inflammation of the subcutaneous tissues on both legs on both sides of the tibia. In the second child, a boy aged thirteen months, who was born from a healthy mother, and who acquired syphilis at the age of eight months from the nipple of his mother, the following symptoms presented themselves: 1. A sharply-defined eroded induration on the left side of the point of the tongue, possessing the marks which have been already given as characteristic of an initial induration. 2. Swelling of the glands in the left submental and submaxillary regions. 3. An eruption maculated and papular in its character. Among the numerous conclusions that could be drawn from these facts, the following were brought prominently forward, but some of them only go to support observations already made: 1. That a true syphilitic infection can take place on any part of the skin or mucous membrane. This view of the possibility of infection without coitus was strongly combated by Ricord, who was often very satirical at the expense of those who made the exact observations by which the facts were established, particularly in the case of Waller of Prague. 2. That children born of mothers who have been infected in the latter months of gestation, as in this case in the seventh month, can be born with the so-called tertiary affections, to which class belongs the orchitis. The possibility that healthy children can be born under these conditions is not denied; but this case proves that the offspring of such mothers is not always healthy, as has been asserted by numerous authors. The pathological conditions found in this form of orchitis from congenital syphilis would be of interest and importance; but, so far as is known to Professor Lewin, the subject has not been investigated. Whether the condition of the skin upon the legs should have been looked upon as an integral part of the manifestations or not, was not

dwelt upon by the lecturer. 3. That we must receive with caution the view of numerous authors, who assert that in the greater number of children born with syphilis the disease is inherited only from the father, because the most accurate examination fails to reveal any trace of previous sores upon the genitals of the mother. The case of the girl with the primary affection upon the lips was a striking illustration of this, for there was nothing noticed on her genitals; even the glands of the groin and crural region gave no room for suspicion; attention was only called by the swollen condition of the submental gland of the left side, to the flat induration upon the lips, which was already skinned over and lay deep in the surrounding healthy tissues. 4. That women with so-called secondary syphilis can give birth to offspring suffering from so-called tertiary symptoms, the pathological conditions corresponding to which belong to a much more advanced step of the disease. This view, upon which doubt has been cast by many authors, is sufficiently proved by this case. 5. That the symptoms caused by hereditary syphilis present a greater intensity than those of the same disease acquired after birth: the child infected after birth has a stronger constitution, and is affected with rashes of the skin and mucous membranes; the second, with hereditary syphilis, in addition to a weakly constitution, suffers from organic degeneration which must be classed with the so-called tertiary manifestations.

TUBERCULOSIS OF THE LYMPHATICS.

By L. THAON. Translated from *Le Mouvement Médical*, May 17, 1873.

TUBERCULOSIS of the lymphatic vessels is observed under a number of circumstances, which we will enumerate and analyze.

1. It is frequently found during the tuberculous inflammations of the strumous. The diseased lymphatics may then be seen under the microscope to be wholly superficial, lying almost under the epithelium or showing plainly in the sub-serous tissue. Klebs has experimentally produced on animals these tuberculous lesions of the peritoneal lymphatics, and has made histological studies of them with the aid of injections of silver.

2. In tuberculosis of the intestine, when the ulceration reaches a certain depth, nothing is more common than to see lymphatics, knotted, interlaced, and bleached, forming a net-work in the visceral peritoneum corresponding to the ulceration; thence they return to the glands which lie in the adherent border of the intestine, and pursue their course in the mesentery to be lost in the mesenteric glands. In one case of intestinal tuberculosis we have seen a lymphatic resembling a white, twisted cord, leaving an ulcer of the mucous membrane, and making a marked prominence for some distance before penetrating to the deeper layers.

3. In the diaphragm we have likewise seen numerous lymphatics invaded by tuberculosis during the course of a tuberculous diaphragmatic pleurisy. M. Lépine has pointed out the central tendon of the diaphragm as frequently the seat of tuberculous granulations. Now, at this point, according to Schweigger-Seidell, there exists between the tendinous fibres a tissue analogous to the reticulated glandular tissue. It would be interesting to know how tubercle is developed in this, and whether it undergoes the same evolution as in the glands.

4. We have said previously, when speaking of fibrous granulations of the lung, that Rindfleisch considered them the result of a lymphangeitis; we have denied the correctness of this view, and we confess that, to our great astonishment, we have never been able to observe anything in pulmonary phthisis which could be attributed to the lymphatics.

5. In a tuberculous testicle we have once discovered a large lymphatic filled with degenerated elements. It is, moreover, highly probable that the majority of granulations of the testicle arise at the expense of the epithelial cells which line the lymphatic spaces described by Ludwig, around the spermatic ducts.

We thus explained the appearance of a curious specimen presented to the Anatomical Society in 1872 by M. Reclus. It consisted of a testicle larger than a hen's egg, of a whitish color, composed of a series of cords some of which were almost one millimetre in diameter.

6. In two cases of tuberculosis of the female genitals we have observed a number of lymphatics similar to those of the mesentery in tuberculosis of the intestines. These lymphatics formed net-works under the serous membrane which covers the posterior face of the uterus and the wings of the broad ligament.

7. In the brain the granulations are developed in the lymphatic peri-vascular sheath, which we know to be the equivalent of the lymphatic vessels of other organs.

To sum up, the lymphatics play an important rôle in tuberculosis. Sometimes they are limited to serving as canals for the transportation of the infecting materials which go to the glands; at other times they themselves take part in the tuberculosis, constituting *tuberculous lymphangeitis* mixed with *granulations*. These lesions may easily be studied on specimens hardened with Müller's solution, gum, alcohol, and on sections colored with picro-carminate of ammonia. They are very exactly described in the manual of MM. Ranvier and Cornil (p. 582): "In the first stage the lymphatic vessels are filled with white globules and with cells of various forms proceeding from the vascular epithelium; the walls of the latter and the adjoining connective tissue are to a great extent filled with embryonic cells. In the second stage the cells collected in the walls of the lymphatics and in the connective tissue form, with the cellular contents of the vessels, a nodule having all the characters of a tuberculous granulation. These nodules placed in the track of the lymphatics are more or less distant from each other, and have been in many cases confounded with granulations arising from the connective tissue." Let us add that nearly all this work of proliferation is done at the expense of the lymphatic endothelium, and that we are occupied with a veritable caseous endo-lymphangeitis mixed with granulations.

CUTANEOUS ABSORPTION OF POISONS.—In a recent note to the Paris Academy, M. Bernard describes a series of experiments for the purpose of testing the degree of cutaneous absorption which took place in a bath impregnated with the substances to be tested. Every precaution was taken to prevent the possibility of the substances entering the system of the patient by any avenue except the skin. He was then submitted for a short time to steam vapor charged with iodide of potassium, and two or three hours afterwards the urine gave unmistakable evidence that the iodide had been absorbed and was passing through the system.

In these experiments the medicinal agent reached the skin in hot aqueous vapor, and therefore acted more readily than an ordinary cold solution; but the fact of cutaneous absorption was very definitely illustrated. M. Bernard adds,—

"M. Colin has described an experiment in which he allowed water charged with cyanide of potassium to fall for five hours on a horse's back. This caused the death of the animal; the sebaceous (fatty) matter having been destroyed through percussion, and cutaneous absorption taking place."

PHILADELPHIA
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EDITORIAL.

SPLINTS.

IN a recent admirable article in the *Popular Science Monthly*, Mr. Herbert Spencer attempts to explain the persistence of the mechanic arts among rude peoples, by comparing the products of their labor with some of the thoughtless repetitions of imperfect models so common among the workmen of to-day. We can all testify to the intractableness of the American mechanic, particularly of him who is the power in the cutler's shop. Liberal wages have had little effect, apparently, in stimulating his inventive powers or inducing him to carry out the conceptions of the practitioner who may employ him, and the surgeon is often compelled to devise the patterns of his instruments, leaving to the artisan merely the work of giving them durable shapes. Mr. Spencer could not complain of exact adaptation of means to end in this branch of industry. Unfortunately, the motive of the inventor is often to fix his name to an apparatus, rather than to improve a method of treatment. Jones is no longer satisfied with Brown's modification of Smith's splint; so he writes a paper asserting the value of a certain hook or screw, and counts the result as fame,—often neglectful of the fact that some other worthy had better described the same point long before.

The average mind is surprisingly fertile on the subject of splints. This was exemplified at a recent meeting of the American Medical Association. The session of the surgical section had been unwontedly dull, until a member began to discuss the treatment of fracture, when it was discovered that there were present many gentlemen who were authorities on the subject. An incontinent discussion ensued on the comparative merits of splints of starch, wood, wire, paper, glass, and plaster, until the gavel of an exhausted chairman checked it in order that the business of the section might proceed. It has been said of the author of a single book that he was the publishers' measles, since they had had him but once. Many surgeons would appear to believe that they *must* invent a splint, at least once; but, as a prophylactic in such cases, we would commend the perusal of a paper by Dr. Edward Hartshorne in a recent volume of the *American Journal of the Medical Sciences*, on the bibliography of the treatment of fractures of the femur by extension. Let them ponder and be wise.

The effect of this over-inventiveness is to give an unscholarly tone to an important department of medical literature, to say nothing of the minor evil of encumbering the practitioner's office with apparatus about as useful as the ends and fragments depicted in Hogarth's "Finis." All credit to those who contribute to our stock of improved appliances; but candidates for such regard should be sure of the justice of their claims before placing them on record.

THE WILLS HOSPITAL.

THIS useful charity is dispensing its benefits to an annually increasing number of patients. It is stated in the report for 1872, recently issued, that during the year there were treated 362 in-patients and 2514 out-patients, and that 628 operations were performed.

This hospital was opened in 1834, through the liberality of James Wills, "for the sole use of the indigent blind and lame," and, in accordance with the express terms of his will founding the institution, it was denominated "*The Wills Hospital for the Relief of the Indigent Blind and Lame.*" From the report for 1872 it appears that the title has been changed—by what authority we know not—to *Wills Ophthalmic Hospital*, from which we infer that the lame are hereafter to be excluded from the benefits of the institution,—an inference strengthened by the fact that no cases of lameness are reported to have been treated at the hospital during the past year.

That the lame of Philadelphia need hospital accommodation is proved by the large number who are annually treated at the Orthopædic Hospital, an institution whose recent foundation may have

been rendered necessary by the non-treatment of orthopædic cases at the Wills Hospital.

We have no doubt that the funds dedicated to the hospital are well administered; but there are so many questions, legal and otherwise, connected with the management of charitable bequests, that it would seem only prudent for those concerned to obey the letter as well as the spirit of the testator's wishes.

IT is not often that rogues disgorge ill-gotten plunder. It is stated, however, by the London *Times* that Dr. Holloway, of pill and ointment fame, is devoting the enormous sum of 350,000 pounds sterling to the erection of lunatic and other hospitals. It is well to undo, as far as possible, what is wrongly done. But, before we praise the munificence of this patent-medicine vendor, we would like to know how much he retains of the money wrung from misery by false hopes and promises. As the world goes, we suppose, however, Dr. Holloway will reap his reward. The man who gulls the multitude in so royal a manner must be smart, though he be unprincipled; and successful smartness is the talisman to outward homage. After all, however, the doctor must know that he is but a "quack doctor," and that the men who bow before him know it also.

THE South of France does not appear to be a paradise for careless pharmaciens, as is shown by the account of a recent transaction given in the *Bulletin Commercial de l' Union Pharmaceutique* for June. It seems two ladies were poisoned by stramonium given for saponaria by an apprentice. Although they recovered without serious consequences, the *ministère publique* censured the unfortunate apothecary in very severe terms, and the police court sentenced him to a fine of two hundred francs. Worse still, the two ladies have sued for damages to the extent of twenty thousand francs. As they promise to give the money to charities, supposing that French juries are like those of America, the apothecary, if he be rich, had better compromise the civil suit.

TEST FOR IMPURITIES IN WATER.—An English technical periodical says, "Good water should be free from color, unpleasant odor and taste, and should quickly afford a lather with a small portion of soap. If half a pint of the water be placed in a perfectly clean colorless glass-stoppered bottle, a few grains of the best lump white sugar added, and the bottle freely exposed to the daylight in the window of a warm room, the liquid should not become turbid, even after exposure for a week or ten days. If the water become turbid, it is open to the grave suspicion of sewage-contamination; but if it remain clear, it is almost certainly safe. We owe to Heisch this simple, valuable, but hitherto strangely neglected test."

REVIEWS AND BOOK NOTICES.

THE LOCAL USE OF TAR AND ITS DERIVATIVES, INCLUDING CARBOLIC ACID, IN THE TREATMENT OF SKIN DISEASE. By L. D. BULKLEY, A.M., M.D., Physician to the New York Dispensary for Cutaneous Diseases. Reprinted from Dr. Brown-Séquard's Archives of Scientific and Practical Medicine, April, 1873. J. B. Lippincott & Co., New York and Philadelphia. Pamphlet, pp. 25.

In this little pamphlet, which is a welcome contribution to the therapeutics of diseases of the skin, the practitioner will find much useful information which has hitherto been scattered through journals and special works on dermatology.

Dr. Bulkley gives a concise account of the different varieties of wood tar, the pix liquida of the U. S. P., ol. picis, ol. cadini, ol. rusci, and ol. fagi; as well as their source, their preparations, and their application. Then, after devoting a few pages to their therapeutical indications, he goes on to speak of their derivatives—pyroligneous acid, acetic acid, creasote, pitch, turpentine, resin, and resineon—in the same manner. Giving a brief notice of the uses of coal tar, he goes into a consideration of its derivatives, carbolic acid and petroleum, the former at some length.

Dr. Bulkley shows the beneficial effect of the use of tar and its derivatives in the later and less acute stages of eczema, as well as in psoriasis, prurigo, and the various parasitic skin affections. He very properly suggests withholding these preparations in the acute stage of eczema, at which period their incautious use has frequently resulted in marked aggravation of the inflammatory symptoms.

The occasional want of toleration which is shown by some skins towards these preparations is alluded to; a fact worthy to be remembered, in order that where a large extent of surface is involved in disease, an experiment may first be made on a small portion of the skin before the more general use of the application.

Dr. Bulkley introduces to the notice of the profession a preparation which he has named "liquor picis alkalinus," being essentially a watery solution of tar by means of caustic potash. This solution is said to have been used with advantage in the various stages of eczema, in psoriasis, and in lupus erythematosus: it certainly seems worth a more general trial.

On one point we must be allowed to enter a mild protest, and that is against the use of the word "petroleum" to indicate the fluid usually sold for illuminating purposes and generally known as "kerosene." The term "petroleum" is properly applied to the crude product drawn from the oil-wells of Pennsylvania and other localities, from which most of the "kerosene" or "coal oil" of commerce is derived by a process of distillation. A. V. H.

BODY AND MIND: an Inquiry into their Connection and Mutual Influence, especially in Reference to Mental Disorders. A New and Revised Edition, to which are added PSYCHOLOGICAL ESSAYS. By HENRY MAUDSLEY, M.D., Professor of Medical Jurisprudence in University College, London. London, Macmillan & Co., 1873.

In this new edition of a well-known book the changes consist in the introduction of essays on "Conscience and Organization," on "Hamlet," and on "Swedenborg;" and we must confess that the additions strike us as being even more interesting and instructive than the original Gulstonian lectures on "Body and Mind," which form the *pièce de résistance* of the work. We would not like to be forced to choose between the stake and the full acceptance of Dr. Maudsley's doctrines; but, so long as

variety may be enjoyed without suffering, we will continue to derive pleasure both from our own opinions and the highly suggestive papers of the learned professor.

The essay upon Conscience and Organization is an extremely important one, and certainly shows most clearly what we suppose no medical thinker will deny, that wickedness—moral insanity, if you choose—is very often dependent upon an improperly organized brain; but this does not prove that it is always so, much less that conscience is simply the product of organization. The most skilful musician will produce discords if his instrument is out of tune; and if there be such an entity as a *spirit* in man, the manifestations of that spirit must be influenced by the disorders of the system through which it acts. Ergo, the having proved that a physical derangement affects or disturbs the workings of conscience is, by itself, no step towards proving that conscience has not a distinct spiritual existence; and just at this point on which the materialistic argument breaks is the chasm which separates the scientifically knowable from the scientifically unknowable.

Swedenborg our author shows to have been a madman, with a streak of genius in his insanity, and a tinge of obscenity borrowed from remembrances of the companions in dalliance with whom he spent the leisure hours of his youth and middle age. If, as his followers assert, he drank deeply of spiritual joys, he certainly reserved them until, for him, the fountains of carnal pleasure were exhausted.

We have often wondered for what object many book notices are written, and have concluded that it is frequently to fill up the columns of a journal, to gratify personal spite, or to contrast the profundity of the critic with the author's lack of wisdom. We conceive, however, that the proper motive, the originating reason, so to speak, should, in a journal like this, be duplex,—to express an opinion as to the merits of the work, and to enable readers to determine whether they do or do not desire to purchase it.

We commend this book, then, as the functional excretion of a delicately organized cerebrum, whose cell-structure has evidently been improved by high culture. As to buying it, reader, if you belong to that class of miserable mortals who see nothing more in our profession than a philosopher's stone by which the transmutation of nauseous drugs into wholesome bread and butter may be accomplished, you need not buy this book. If you want to be more than this,—a thinking, reasoning representative of the highest science, that which deals with humanity,—buy the book, or at least read it. Understood aright, it will widen your thought, deepen your sympathy, and increase that reverent humility which the true man of science always feels when he approaches the boundaries between the finite and the infinite.

GLEANINGS FROM OUR EXCHANGES.

Physiology of the Biliary Secretion.—Röhrig contributes a paper on this subject to the last part of Stricker's *Medizinische Jahrbücher* (Heft ii., 1873). His experiments were conducted on dogs and rabbits fully under the influence of curara. A bent-glass tube was inserted into the ductus communis choledochus in a large curarized rabbit, in which artificial respiration was maintained. He obtained, at the commencement of an experiment lasting about half an hour, one drop of bile every eight seconds, but at the close only one drop in every seventeen seconds. The last-secreted bile was more intense in color than the first, and was more glutinous. Compression of the vena portæ, or of the hepatic artery, or of both together, caused an immediate diminution of the quantity of the secretion, but after some time, though the compression was continued, the liver recovered its activity to some extent. A rabbit which yielded one drop of bile in about twenty-four seconds before compression only yielded one drop of bile per seventy seconds after; and a dog previously giving one drop in thirty seconds only gave one per eighty or ninety seconds after compression. Ligation of the thoracic aorta just above the diaphragm reduced the secretion in a dog from one drop in seven seconds to one in fifty. Ligation below the cœliac axis raised the rapidity of the secretion from one drop in eight seconds to one drop in three seconds in a rabbit. Compression of the vena cava ascendens, so as not completely to arrest the flow of blood, caused steady diminution of the flow of bile from one drop in five seconds to one drop in thirty-two seconds. On releasing the vein it again steadily rose to one drop in four seconds. The opposite effects obtained from ligature of the venæ cavæ and compression of the aorta demonstrate, Röhrig thinks, that the formation of the biliary secretion is not exclusively dependent upon the degree of pressure in the capillaries, but rather upon the current and quality of the blood. Injection of water into the intestinal canal increases the biliary secretion, and to a greater extent than the injection of the same quantity into the blood-vessels. Irritation of the mucous membrane of the intestinal canal in various parts from the mouth to the anus, as well as of the peritoneum, was not attended with any very definite results. Digestion always increased the quantity secreted considerably, and when the partially digested contents of one dog's stomach were injected into that of another, the quantity of bile began to rise rapidly in ten minutes. Croton oil, colocynth, jalap, aloes, rhubarb, senna, sulphate of magnesia, calomel, and castor-oil, all increase the flow of bile; the two latter, however, only feebly, the first two vigorously. Section of the splanchnic nerve caused increase of the biliary secretion; neither section nor irritation of the vagi sympathetici had any influence on the amount. Division of the spinal cord was followed first by increase and then by retardation of the flow. Indirect irritation of the spinal cord by electricity prolonged the periods between the drops. Suspension of the respiration was variable in its action, but, as a rule, retarded the secretion. Opium rather increased the flow of bile by its paralyzing influence on the peripheric vessels; it checked diarrhœa by its action on the peristaltic movements.

Treatment of Chilblain by Electricity.—Dr. Santopadre makes known, in *Gaz. Med. de Provincie Venete*, a means which he has employed with success for the treatment of chilblain,—namely, electricity. He makes use of Gaiffe's electro-magnetic apparatus, and of a current of middling intensity. The positive pole is placed in the neighborhood of, and a little above, the inflamed spot, and the negative pole to the inflamed spot itself. The sitting lasts about ten or fifteen minutes, and is repeated if necessary the following day. Generally after the very first sitting the itching ceases and the pain is much abated. After the third or fourth sitting recovery is complete.

Contribution to the Pathological Anatomy and Physiology of Urinary Tumors and Abscesses.—In a communication to *Le Mouvement Médical*, M. Henri Dransart, *interne* of the Paris hospitals, gives the following propositions as the results of his clinical observations and dissections:

1. Chronic blennorrhagia produces a sclerosis or cirrhosis of the urethral spongy tissue.

2. Sclerosis of the spongy tissue results in the disappearance of the cavities, and in a new vascular forma-

tion like that seen in cirrhosis of the liver or of the lung; the vessels are less numerous, of small calibre, and have young and feeble walls.

3. There occur in the submucous tissue hemorrhages whose mechanism is explained on the one hand by the function of the organ,—coitus and other acts,—and on the other by the nature of the newly-formed vessels which nourish the fibrous tissue.

4. These hemorrhages are the origin of a large number of the tumors and urinary abscesses which occur during the existence of strictures. We can easily conceive that they may be very slight and occasion merely phenomena of engorgement in the substance of the submucous tissue of the urethra.

He states that Chopart was familiar with this cirrhosis or fibrous degeneration of the spongy tissue, and designated it as "scirrhous degeneration," a difference merely in the name. M. Voillemier has pointed out the occurrence of hemorrhages in the new tissue, but has not sought to explain their originating cause, which lies in the nature of the vessels replacing the primitive vascular apparatus. The development of new branches of the bronchial and hepatic arteries in cirrhosis of the liver and lungs enters to-day into the crudest notions of pathological anatomy; and this science has also taught us that vessels of a new formation usually have feeble walls. These facts being known and applied to the urethra, whose special functions are understood, hemorrhages and the tumors and abscesses which are their sequelæ might be reasonably anticipated.

M. TRÉLAT ON THE OPERATIONS FOR PHIMOSIS.—M. Trélat, Professor of Surgical Pathology at the School of Medicine, and Surgeon to the Hôpital La Charité, lately delivered a very interesting lecture on the treatment of phimosis. He premised his lecture by a few remarks on the etiology, or rather the pathology, of phimosis, which, he stated, consists of two forms,—the congenital and accidental. It may be also complete or incomplete. In the former, the preputial orifice is so contracted as to prevent the free passage of the urine, or the phimosis, without extending to that degree, may just be sufficient to prevent the uncovering of the glans, and thus favor the accumulation of the secretions, constituting the condition termed balanitis; or, when the prepuce is forcibly drawn back over the glans, it produces paraphimosis. For both forms of phimosis operative measures hold out the only chance of cure. For the congenital form, forced dilatation, as recommended and practised by Nélaton, may be useful, but for that produced by disease it is out of the question. In either case M. Trélat prefers the radical cure, by circumcising or slitting up the prepuce, as he considers the dilatation plan as being not only a most awkward operation, but one which affords only temporary relief, after which relapses almost invariably occur, and which is frequently followed by paraphimosis. As the best proof that can be given of the necessity of an operation, M. Trélat stated that he has known old men who, after having borne the complaint for years, were obliged at last to submit to an operation. He had operated on three old men, aged respectively 63, 64, and 67. The prepuce of the last subject had a most unnatural appearance, as it had become hard and gristly, and considerably hypertrophied, and when this portion of the prepuce was removed by circumcision it was impossible to bring the skin and mucous lining together, and the wound in consequence was more than two months in healing. At what age may phimosis be operated on? is a question often asked; and M. Trélat thinks that there are three periods at which the operation may be conveniently performed, viz., from three to seven, from eighteen to twenty-five, and then in old men who are the subject of chronic balanitis. In children it is best to defer the operation as long as possible,—unless the phimosis is attended with great inconvenience, such as the accumulation of urine between the glans and foreskin, and consequent balanitis, or if the young subject is given to masturbation,—as the difficulty of the operation consists in the keeping the two cut edges in apposition. M. Trélat performs circumcision when the phimosis is simple, that is, when there is simple prolongation of the foreskin, accompanied with only slight contraction of the orifice; but when the phimosis is attended with the inconveniences mentioned above, he adopts the slitting plan; and, if the prepuce is long and thickened, he snips off the two ends that overhang each side. In this operation M. Trélat remarked that the foreskin should be slit well up to the corona glandis, otherwise the phimosis remains uncured, and after a time the patient comes back justly dissatisfied with the surgeon and demands a renewal of the operation. The incisions made, he applies a certain number of serrefines (from ten to fifteen), which he prefers to sutures: they, however, should be kept on for only a short time. In general, he removes them at the end of twenty-four hours, for if kept longer they are liable to produce sphacelus. —*Irish Hospital Gazette*, July 15, 1873.

HOMŒOPATHIC PILULES (*The Practitioner*, July, 1873).—The most careful chemical analyses have failed to demonstrate the presence of either aconite, atropia, or belladonna in pilules which professedly contained in one hundred parts one part by weight of the drug. Comparative experiments showed that $\frac{1}{8000}$ of a grain of aconite would have been detected with certainty. This corresponds to about $\frac{1}{160}$ of a grain of the extract of aconite; while the quantity which should have been present is from $\frac{1}{2}$ to nearly one grain, or more than one hundred times more. Similarly, $\frac{1}{8000}$ of a grain of atropia would have been discovered,—twenty-four times as much was supposed to exist in the preparation.

We would certainly be obliged to place cures, should there be any following the use of such pilules, entirely to the credit of the imagination.

INJECTIONS OF ALCOHOL INTO FATTY TUMORS (*Medical Press and Circular*, May 21, 1873).—Dr. Hasse, of Nordhausen, recommends the injection of alcohol into the substance of adipose or lipomatous tumors. He gives one case of a female who had a large fatty tumor reaching from the shoulder to the armpit. He injected alcohol into this at four different sittings, with fifteen days' interval, directing the syringe into different parts of the tumor. In a few days there was some slight inflammation. The tumor at first became firmer, but soon softened and fluctuated at several points. In three weeks an incision was made, and the fatty matter could be pressed out in a liquid form. In another case, of a man aged forty, similar treatment was adopted, with a similar result.

TEMPERATURE IN EPILEPSY AND HYSTERIA (*Le Mouvement Médical*, No. 11).—Dr. Bourneville states that he has satisfied himself, from observations taken in the Salpétrière and St. Louis Hospitals, that during an attack of epilepsy the temperature augments; so also in attacks of epileptiform hysteria the temperature rises. On the contrary, in pure hysteria there does not appear to be any increase. He thinks that by this means it is possible to distinguish an attack of true from one of feigned epilepsy. When the disease is simulated, the attacks are always the most severe possible, yet the temperature does not rise above the physiological degree; but when the real attacks are severe, the temperature not only rises during the fit, but remains above the normal for several hours.

MISCELLANY.

OBSCENE LITERATURE.—The following extract from a letter, dated January, 1873, by Mr. Anthony Comstock, of Brooklyn, to Hon. Clinton L. Merriam, shows that the law recently passed by Congress is doing good. Mr. Comstock says,—

"These I have seized and destroyed: Obscene photographs, stereoscopic and other pictures, more than 182,000; obscene books and pamphlets, more than five tons; obscene letter-press in sheets, more than two tons; sheets of impure songs, catalogues, handbills, etc., more than 21,000; obscene microscopic watch- and knife-charms and finger-rings, more than 5000; obscene negative plates for printing photographs and stereoscopic views, about 625; obscene engraved steel and copper plates, 350; obscene lithographic stones destroyed, 20; obscene wood-cut engravings, more than 500; stereotype plates for printing obscene books, more than five tons; obscene transparent playing-cards, 5500 to 6000; obscene and immoral rubber articles, over 30,000; lead moulds for manufacturing rubber goods, twelve sets, or more than 700 pounds; newspapers seized, about 4600; letters from all parts of the country, ordering these goods, about 15,000; names of dealers in account-books seized, about 6000; arrests of dealers since October 9, 1871, over 50; publishers, manufacturers, and dealers dead since March last, 6.

"There are various ways by which this vile stuff has been disseminated. First, by advertising in the above-named papers. Some weeks there is not a single advertisement in some of the papers that is not designed either to cheat or defraud, or intended to be a medium of sending out these accursed books and articles. For instance, I have arrested a number of persons, one in particular, who advertised a musical album, to be sent for fifty cents. I sent the fifty cents, and received back a catalogue of obscene books, with the following card attached:

"'The album is only a pretence to enable us to forward you a catalogue of our fancy books. Should you order any of these books, your fifty cents will be credited.'

"It is needless to say, I ordered, then arrested him, locked him up in the New Haven jail, and he has been indicted by the grand jury in the United States Court of Connecticut, and now is held on bail for trial. In the same way, by advertising beautiful views or pictures of some celebrated place or person, these men receive answers from innocent persons for these pictures, and among the pictures sent will be one or more of these obscene pictures, and catalogues of these vile books and rubber goods. For be it known that wherever these books go, or catalogues of these books, there you will ever find, as almost indispensable, a complete list of rubber articles for masturbation or for the professed prevention of conception."

PRACTICE AND PREGNANCY.—A rather amusing story is current just now about a Mrs. Anderson, which serves to illustrate the ground of English prejudice to feminine invasion of male pursuits. Mrs. Anderson has been married now for about two years, and, as she is a person of some note, socially and professionally, she is much talked about. It was lately very generally reported that she was likely soon to be a mother. For some reason, she seemed to think that such a report ought not to be allowed to pass uncontradicted, and she has adopted the remarkable step of writing to a physician, who was one of those who had repeated the rumor, denying its accuracy, and requesting that he would take proper occasion of contradicting a statement which was likely to be injurious to her practice. This seemed to me incredible, but it has been confirmed as a fact; and the notion that a married woman should think it due to herself to contradict the statement that she was *enceinte*, has a sad and serious as well as a ludicrous side of it, to those who think that the highest ambition of any woman is to become a mother, and that the greatest misfortune which can happen to her is to fail in that high mission and noble ambition of womanhood and wifehood.—*London Letter to Boston Journal.*

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY, FROM JULY 29, 1873, TO AUGUST 11, 1873, INCLUSIVE.

SIMONS, J., SURGEON AND MEDICAL DIRECTOR.—Granted leave of absence for thirty days, with permission to apply for an extension of thirty days. S. O. 124, Department of the Gulf, July 28, 1873.

FRANTZ, J. H., SURGEON.—Leave of absence extended from July 20, 1873, seventy days, on Surgeon's certificate of disability. S. O. 153, A. G. O., July 29, 1873.

WEBSTER, WARREN, SURGEON.—Granted leave of absence for thirty days. S. O. 143, Department of the East, July 28, 1873.

KNICKERBOCKER, B., ASSISTANT-SURGEON.—Leave of absence granted by S. O. 88, Department of the Columbia, July 15, 1873, extended thirty days. S. O. 135, Military Division of the Pacific, July 23, 1873.

CLEARY, P. J. A., ASSISTANT-SURGEON.—Assigned to duty at Fort Griffin, Texas. S. O. 139, Department of Texas, July 25, 1873.

MUNN, C., ASSISTANT-SURGEON.—Assigned to temporary duty at Fort Independence, Boston Harbor, and to return to his proper station (Fort Adams, R. I.) when Surgeon Webster reports from his leave. S. O. 143, c. s., Department of the East.

SIMPSON, JOHN, SURGEON.—Granted leave of absence for three months, on Surgeon's certificate of disability. S. O. 163, A. G. O., August 9, 1873.

SIMONS, J., SURGEON AND MEDICAL DIRECTOR.—Leave of absence extended thirty days. S. O. 45, Military Division of the South, August 5, 1873.

ALEXANDER, C. T., SURGEON.—Granted leave of absence for thirty days. S. O. 162, A. G. O., August 8, 1873.

WOLVERTON, W. D., ASSISTANT-SURGEON.—Relieved from duty in Department of Dakota, to proceed to New York City, and, on arrival, report by letter to the Surgeon-General. S. O. 158, A. G. O., August 2, 1873.

SMART, CHARLES, ASSISTANT-SURGEON. — Assigned to duty at Fort Bridger, Wyoming Territory. S. O. 129, Department of the Platte, August 5, 1873.

CLEARY, P. J. A., ASSISTANT-SURGEON.—Relieved from duty in Department of Texas, and to proceed to New York City, and, on arrival, report by letter to the Surgeon-General. S. O. 160, A. G. O., August 6, 1873.

WIGGIN, A. W., ASSISTANT-SURGEON.—Granted leave of absence for thirty days, with permission to leave limits of Department and apply for an extension of thirty days. S. O. 95, Department of the Columbia, July 28, 1873.